REMARKS

Claims 1-10 are pending in the application. Claims 1-10 were rejected by the Examiner. Claims 1, 2, 4-6, 9 and 10 are rejected under 35 USC § 103(a) as being unpatentable over Parulski et al. (US Patent No. 5,914,748) in view of Brady et al. (US Patent No. 5,684,898).

As amended, claim 1 requires that the probability function for each pixel be calculated directly, that is without a look up table, and that a probability map is produced. The feathering performed after the new background is combined with the foreground image is based upon weighted values for the pixels, where the weighted values come from the probability map. This is not shown, taught nor suggested by the combination of references.

As discussed in the detailed action, Brady uses a look up table to determine the probability. This probability is not 'calculated' and certainly not 'calculated directly.' There is no probability map in the combination of references. In addition, the only mention of feathering after the images are combined is in Parulski, but the feather performed there is apparently by hand in a photographic package such as Adobe Photoshop®. There is no use of weighted values, nor no use of a probability map.

It is therefore submitted that claim 1 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claims 2, 4-6, 9 and 10 depend from claim 1 and should be ruled allowable for that reason and for their own merits. The combination of references does not teach the invention as claimed in claim 1, much less the further limitations of the dependent claims. It is submitted that claims 2, 4-6, 9 and 10 are patentably distinguishable over the prior art and allowance of these claims is requested.

Claim 3 is rejected under 35 USC § 103(a) as being unpatentable over Parulski et al. in view of Brady et al. and in further view of Gehrmann (US Patent No. 5,382,980).

The combination of reference does not teach calculating the probability for each pixel directly, much less that a refinement of this calculation will be done in YCbCr color space. Further, there is no probability map in the combination of references, much less the use of the probability map to weight pixel values for feathering. It is therefore submitted that claim 3 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 7 is rejected under 35 USC § 103(a) as being unpatentable over Parulski et al. in view of Brady et al. and in further view of Jang (US Patent No. 5,825,909). The combination of references does not teach the use of anisotropic diffusion after an initial classification. As mentioned in the detailed action, Parulski does not teach anisotropic diffusion at all. Jang teaches using anisotropic diffusion as part of the image smoothing, and 'that the first step for segmenting the image is the step of image smoothing.' As discussed in Applicant's specification on pages 5-6, the image is first classified as foreground/background and then anisotropic diffusion is applied. This is counter to Jang. In addition, the combination of references is questionable as Parulski teaches an additional refining step, *after* initial image segmentation, and Jang teaches anisotropic diffusion as part of image smoothing, which is the *first* step of image segmentation. It is therefore submitted that claim 7 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 8 is rejected under 35 USC § 103(a) as being unpatentable over Parulski et al. in view of Brady et al. and in further view of Gardos et al. (US Patent No. 5,710,602). The combination of references does not teach that the initial classification to which morphological filtering is applied uses a probability function to directly calculate the probability for each pixel of an input image, or that a probability map is produced as a result. It is therefore submitted that claim 8 is patentably distinguishable over the prior art and allowance of all claims is requested.

No new matter has been added by this amendment. Allowance of all claims is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Julie L. Reed

Julie L. Reed
Reg. No. 35,349

MARGER JOHNSON & McCOLLOM
1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613
Customer No. 20575